

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

- 1           1. (Currently amended) A method for allocating computer system  
2 resources between concurrently executing workloads, comprising:  
3           establishing a first resource pool that specifies requirements for each of a  
4 plurality of different computer system resources, wherein the plurality of different  
5 computer system resources are components of a single computer system, and  
6 wherein establishing the first resource pool involves establishing minimum size  
7 and maximum size requirements for a given resource that can be assigned to the  
8 first resource pool;  
9           allocating the plurality of different computer system resources to one or  
10 more resource pools, including the first resource pool, to create a resource  
11 allocation, wherein requirements of the first resource pool are satisfied, wherein  
12 prior to allocating the plurality of different computer system resources, the method  
13 further comprises:  
14                     verifying that collective requirements of the one or more  
15                     resource pools can be satisfied, and  
16                     if the collective requirements cannot be satisfied, signaling  
17                     an error condition; and  
18           wherein resources allocated to the first resource pool can change over  
19 time; and

20 binding a first process to the first resource pool, so that the first process  
21 has access to the plurality of different computer system resources allocated to the  
22 first resource pool; and  
23 storing a representation of the resource allocation to non-volatile storage  
24 so that the resource allocation can be reused after a machine failure.

1 2. (Original) The method of claim 1, wherein allocating the plurality of  
2 different computer system resources to one or more resource pools involves:  
3 partitioning each of the plurality of different computer system resources  
4 into one or more partitions, wherein a first partition is associated with a first  
5 resource and a second partition is associated with a second resource;  
6 allocating the first partition to a single resource pool, so that only  
7 processes associated with the single resource pool can access the first partition;  
8 and  
9 allocating the second partition to multiple resource pools so that processes  
10 associated with the multiple resource pools can share the second partition.

1 3 (Canceled).

1 4. (Original) The method of claim 1, wherein establishing the first  
2 resource pool involves selecting a file containing a representation of the first  
3 resource pool from a plurality of possible files.

1 5 (Canceled).

1 6. (Currently amended) The method of ~~claim 5~~ claim 1, wherein storing  
2 the representation of the resource allocation involves storing a representation of  
3 each of the one or more resource pools along with associated resources.

1 | 7. (Currently amended) The method of ~~claim 5~~ claim 1, wherein storing  
2 the representation of the resource allocation involves storing an Extensible  
3 Markup Language (XML) representation of the resource allocation.

1 8. (Original) The method of claim 1,  
2 wherein the first resource pool is associated with a first project; and  
3 wherein the first process is one of a plurality of processes associated with  
4 the first project.

1 9 (Canceled).

1 10. (Original) The method of claim 1, further comprising dynamically  
2 adjusting the resource allocation during system execution.

1 11. (Original) The method of claim 1, wherein the plurality of different  
2 computer system resources can include:  
3 central processing units;  
4 semiconductor memory;  
5 swap space; and  
6 networking resources.

1 12. (Currently amended) A computer-readable storage medium storing  
2 | instructions that ~~when are~~ executed by a computer ~~cause to cause~~ the computer to  
3 perform a method for allocating computer system resources between concurrently  
4 executing workloads, the method comprising:  
5 establishing a first resource pool that specifies requirements for each of a  
6 plurality of different computer system resources, wherein the plurality of different  
7 computer system resources are components of a single computer system, and

8 | wherein establishing the first resource pool involves establishing minimum size  
9 | and maximum size requirements for a given resource that can be assigned to the  
10 | first resource pool;  
11 |       allocating the plurality of different computer system resources to one or  
12 | more resource pools, including the first resource pool, to create a resource  
13 | allocation, wherein requirements of the first resource pool are satisfied, wherein  
14 | prior to allocating the plurality of different computer system resources, the method  
15 | further comprises:  
16 |               verifying that collective requirements of the one or more  
17 |               resource pools can be satisfied, and  
18 |               if the collective requirements cannot be satisfied, signaling  
19 |               an error condition; and  
20 |       wherein resources allocated to the first resource pool can change over  
21 | time; and  
22 |       binding a first process to the first resource pool, so that the first process  
23 | has access to the plurality of different computer system resources allocated to the  
24 | first resource pool; and  
25 |       storing a representation of the resource allocation to non-volatile storage  
26 | so that the resource allocation can be reused after a machine failure.

1 |       13. (Original) The computer-readable storage medium of claim 12,  
2 | wherein allocating the plurality of different computer system resources to one or  
3 | more resource pools involves:  
4 |       partitioning each of the plurality of different computer system resources  
5 | into one or more partitions, wherein a first partition is associated with a first  
6 | resource and a second partition is associated with a second resource;

7 allocating the first partition to a single resource pool, so that only  
8 processes associated with the single resource pool can access the first partition;  
9 and  
10 allocating the second partition to multiple resource pools so that processes  
11 associated with the multiple resource pools can share the second partition.

1 14 (Canceled).

1 15. (Original) The computer-readable storage medium of claim 12,  
2 wherein establishing the first resource pool involves selecting a file containing a  
3 representation of the first resource pool from a plurality of possible files.

1 16 (Canceled).

1 17. (Currently amended) The computer-readable storage medium of ~~claim~~  
2 ~~16~~ claim 12, wherein storing the representation of the resource allocation involves  
3 storing a representation of each of the one or more resource pools along with  
4 associated resources.

1 18. (Currently amended) The computer-readable storage medium of ~~claim~~  
2 ~~16~~ claim 12, wherein storing the representation of the resource allocation involves  
3 storing an Extensible Markup Language (XML) representation of the resource  
4 allocation.

1 19. (Original) The computer-readable storage medium of claim 12,  
2 wherein the first resource pool is associated with a first project; and  
3 wherein the first process is one of a plurality of processes associated with  
4 the first project.

1           20 (Canceled).

1           21. (Original) The computer-readable storage medium of claim 12,  
2 wherein the method further comprises dynamically adjusting the resource  
3 allocation during system execution.

1           22. (Original) The computer-readable storage medium of claim 12,  
2 wherein the plurality of different computer system resources can include:  
3           central processing units;  
4           semiconductor memory;  
5           swap space; and  
6           networking resources.

1           23. (Currently amended) An apparatus that allocates computer system  
2 resources between concurrently executing workloads, comprising:  
3           an establishment mechanism that is configured to establish a first resource  
4 pool that specifies requirements for each of a plurality of different computer  
5 system resources, wherein the plurality of different computer system resources are  
6 components of a single computer system, and wherein the establishment  
7 mechanism is configured to establish minimum size and maximum size  
8 requirements for a given resource that can be assigned to the first resource pool;  
9           an allocation mechanism that is configured to allocate the plurality of  
10 different computer system resources to one or more resource pools, including the  
11 first resource pool, to create a resource allocation, wherein requirements of the  
12 first resource pool are satisfied, and wherein resources allocated to the first  
13 resource pool can change over time;  
14           a verification mechanism that is configured to verify that collective  
15 requirements of the one or more resource pools can be satisfied;

16            wherein if the collective requirements cannot be satisfied, the verification  
17 | mechanism is configured to signal an error condition; ~~and~~  
18            a binding mechanism that is configured to bind a first process to the first  
19 resource pool, so that the first process has access to the plurality of different  
20 computer system resources allocated to the first resource pool; and  
21            an archiving mechanism that is configured to store a representation of the  
22 resource allocation to non-volatile storage so that the resource allocation can be  
23 reused after a machine failure.

1            24. (Original) The apparatus of claim 23, wherein the allocation  
2 mechanism is configured to:  
3            partition each of the plurality of different computer system resources into  
4 one or more partitions, wherein a first partition is associated with a first resource  
5 and a second partition is associated with a second resource;  
6            allocate the first partition to a single resource pool, so that only processes  
7 associated with the single resource pool can access the first partition; and to  
8            allocate the second partition to multiple resource pools so that processes  
9 associated with the multiple resource pools can share the second partition.

1            25 (Canceled).

1            26. (Original) The apparatus of claim 23, wherein the establishment  
2 mechanism is configured to select a file containing a representation of the first  
3 resource pool from a plurality of possible files.

1            27 (Canceled).

1 | 28. (Currently amended) The apparatus of ~~claim 27~~ claim 23, wherein the  
2 | archiving mechanism is configured to store a representation of each of the one or  
3 | more resource pools along with associated resources.

1 | 29. (Currently amended) The apparatus of ~~claim 27~~ claim 23, wherein the  
2 | archiving mechanism is configured to store an Extensible Markup Language  
3 | (XML) representation of the resource allocation.

1 | 30. (Original) The apparatus of claim 23,  
2 | wherein the first resource pool is associated with a first project; and  
3 | wherein the first process is one of a plurality of processes associated with  
4 | the first project.

1 | 31 (Canceled).

1 | 32. (Original) The apparatus of claim 23, further comprising an adjustment  
2 | mechanism that is configured to dynamically adjust the resource allocation during  
3 | system execution.

1 | 33. (Original) The apparatus of claim 23, wherein the plurality of different  
2 | computer system resources can include:  
3 | central processing units;  
4 | semiconductor memory;  
5 | swap space; and  
6 | networking resources.